## 10/519037

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## In the Claims:

- 1. (previously amended) A microprocessor with an architecture incorporating several execution units, whereby:
  - (a) one or more registers store results from particular execution units;
  - (b) execution unit operands receive data from one such register;
  - (c) certain execution units are able to copy data from their operands to result registers; and
  - (d) the copy capability is used to allow execution units that are not directly connected to communicate data.
- 2. (original) The microprocessor according to claim 1 whereby one or more of the execution units may be register files.
- 3. (original) The microprocessor according to claim 1 whereby the set of registers associated with a particular execution unit to be written may be specified for each operation.
- 4. (original) The microprocessor according to claim 3 whereby the specification of registers to write is represented in an instruction format.
- 5. (original) The microprocessor according to claim 4 whereby the specification of registers to write is delayed in a pipeline so as to be available on the same clock cycle as the results.
- 6. (original) The microprocessor according to claim 1 whereby the connectivity between execution units is known to code generation software tools.
- 7. (previously amended) The microprocessor according to claim 1 whereby available execution units are specified in a library file.

- 8. (original) The microprocessor according to claim 7 whereby the connectivity of execution units to other units in the system is configurable.
- 9. (original) The microprocessor according to claim 8 whereby the number of output registers associated with an execution unit is configurable.
- 10. (previously amended) The microprocessor according to claim 1 whereby the update of the result registers is dependent on global condition state for certain execution units.
- 11. (original) The microprocessor according to claim 10 whereby the state used to control the output register update is selectable as part of the instruction set.
- 12. (original) The microprocessor according to claim 1 whereby certain identity operations may be issued to an execution unit in order to perform a copy.
- 13. (original) The microprocessor according to claim 1 whereby the operation of certain bits with an execution word control certain execution units on a cycle by cycle basis.
- 14. (original) The microprocessor according to claim 13 whereby the number of bits required to control each execution unit varies depending upon the extent of its connectivity.
- 15. (original) The microprocessor according to claim 13 whereby certain bits within the execution word for each execution unit select different types of operation to be performed.
- 16. (previously amended) The microprocessor according to claim 1 whereby each result register may be connected to one or more execution unit operands.
- 17. (original) The microprocessor according to claim 1 whereby a source register for a particular execution unit operand may be specified by the instruction set.
- 18. (original) The microprocessor according to claim 1 whereby the processor executes a sequence of contiguous execution words.

- 19. (original) The microprocessor according to claim 18 whereby, when the end the execution word sequence is reached, execution may branch to one of a number of different execution word addresses.
- 20. (original) The microprocessor according to claim 19 whereby the same execution word sequence may be repeated to resolve a data hazard.
- 21. (original) The microprocessor according to claim 20 whereby there is a branch control unit for determining the destination of such branches.
- 22. (original) The microprocessor according to claim 21 whereby the branch control unit may accept branches out of their sequential order.
- 23. (original) The microprocessor according to claim 22 whereby the branch control unit may disable the operation of certain subsequent operations depending on the sequential position of an accepted branch.
- 24. (previously amended) A method of operation used in a microprocessor with an architecture incorporating several execution units, whereby:
  - (a) one or more registers store results from particular execution units;
  - (b) execution unit operands receive data from one such register; and
  - (c) certain execution units are able to copy data from their operands to result registers; and
  - (d) the copy capability is used to allow execution units that are not directly connected to communicate data..
- 25. (delete)